a'3

Serail No. 09/837,630

Atty. Docket No. 21417/92141

On page 12, line 11, please add -(SEQ ID NOS: 20-32, respectively, in order of

appearance)--after "antigens"

On page 13, line 8, please add --(SEQ ID NO: 5)-- after "MQEIDKKLTQKN"

On page 13, line 9, please add --(SEQ ID NO: 6)-- after "KNLESYQKDA"

On page 13, line 10, please add --(SEQ ID NO: 7)-- after "QKDAKELKGKRN"

## In the FIGS In FIG

In FIG. 1, please add -- (SEQ ID NO:1) -- after "qknlesyqkdakelkgkrnr"

In FIG. 2a, please add --(SEQ ID NO:2)-- after "homologous sequence"

In FIG. 2a, please add --(SEQ ID NO:3)-- after "protein sequence"

In FIG. 2a, please add --(SEQ ID NO:4)-- after "homologous sequence"

In FIG. 2b, please add --(SEQ ID NO:2)-- after "homologous sequence"

In FIG. 2b, please add --(SEQ ID NO:3)-- after "protein sequence"

In FIG. 2b, please add --(SEQ ID NO:4)-- after "homologous sequence"

In FIG. 3, please add --(SEQ ID NO: 5)-- before "Test Data"

In FIG. 4, please add --(SEQ ID NO:6)-- before "Data"

In FIG. 5, please add --(SEQ ID NO:7)-- before "Data"

In FIG. 6, please add --(SEQ ID NO:8)-- after "LPALKENNGKV"

In FIG. 6, please add --(SEQ ID NO:9)-- after "VTTKGERTFEYNN"

In FIG. 6, please add --(SEQ ID NO:10)-- after "LEQNEGFKRRV"

In FIG. 6, please add --(SEQ ID NO:11)-- after "TVDASGKRSISG"

In FIG. 6, please add --(SEQ ID NO:12)-- after "MWEIDKKLTQKN"

In FIG. 6, please add --(SEQ ID NO:13)-- after "NTRYDRWAKD"

In FIG. 6, please add --(SEQ ID NO:14)-- after "INGDKRTGGKPNTPE"

In FIG. 6, please add -- (SEQ ID NO:15) -- after "SSSEYEKLKA"

In FIG. 6, please add --(SEQ ID NO:16)-- after "KEQIIEAKGPDV"

In FIG. 6, please add --(SEQ ID NO:17)-- after "QQTHRKINRP"

In FIG. 6, please add --(SEQ ID NO:18)-- after "KQAEEANKTP"

In FIG. 6, please add -- (SEQ ID NO:19)-- after "KTPDKPDKVW"

In FIG. 8, please add --(SEQ ID NO:20)-- after "QGQDVRQPG"

In FIG. 8, please add --(SEQ ID NO;21)-- after "GRDGE"

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In FIG. 8, please add --(SEQ ID NO:22)-- after "GGFDEKAGGA"

In FIG. 8, please add --(SEQ ID NO:23)-- after "WPGLPGA"

In FIG. 8, please add --(SEQ ID NO:24)-- after

## "GLPGTPGTDGPKGASGPAGPPGAQGPPG"

In FIG. 8, please add --(SEQ ID NO:25)-- after "GPEGAPGKDGGRGLT"

In FIG. 8, please add --(SEQ ID NO:26)-- after "GEVGPPGPAGSAGARGAP"

In FIG. 8, please add --(SEQ ID NO:27)-- after "TGPKGARGAQGPPGAGFPGAA"

In FIG. 8, please add --(SEQ ID NO:28)-- after "NGNPGPPGPPGPS"

In FIG. 8, please add --(SEQ ID NO:29)-- after "LQGPAGPP"

In FIG. 8, please add --(SEQ ID NO:30)-- after "AVGAPGAPGPPGSPGPAGPGKQGD"

In FIG. 8, please add --(SEQ ID NO:31)-- after "KGHRGFTGLQ"

In FIG. 8, please add --(SEQ ID NO:32)-- after "IGPPGPRGRSGETGPAGPPGN"

No fees in addition to that for the extension of time are believed due at this time,

however, please charge any deficiencies of credit any overpayments to deposit account number 10-0435 with reference to our attorney docket number (21417/92378).

Please contact applicant's representative if there are any issues to be resolved.

Respectfully submitted,

Alice O. Martin

Registration No. 35,601

Attorney for Applicant

BARNES & THORNBURG 2600 Chase Plaza 10 South LaSalle Street Chicago, IL 60603 (312) 357-1313 February 21, 2002 CHDS01 AOM 113376v1





- mktnghfkdfawkkcllgasvgallvgcsphiletnevalklnyhpasekvgaldekill
- lrpafqysd<u>niakeyenkfkn</u>qtvlkveqilqnqgykvinv<u>dssdkddfsfaqkkeq</u>yla 61
- vamnge<u>ivlrpdpkrtiqkksepg</u>llfst<u>gldkmeg</u>vlipagfvkvtilep<u>msgesld</u>sf 121
- $tm\underline{dlseldigekflk} tthsshsgglvstmv\underline{kgtdnsndaik} salnkifgsi\underline{mgeidkklt}$ 161
- <u>qknlesyqkdakelkgkrn</u>r (SEQ ID NO:1)

FIG.

Streptococcus pneumoniae pspA homologous sequence -> (SEQ_ID_NO:2)	××× I D K × X T Q K × L E × × × K D A × E L × × × × ×
H. Dyloti (lagellar sheath adhesion protein sequence -> (SEQ ID NO: 3)	H. Dyloui flageliar sheath adhesion protein sequence ->   MQEIDKKLTQKNLESYQKDAKELKGKRN (SEQID NO: 3)
Mycoplasma hominis Lp1 homologous sequence -> (SEQ ID NO: 4)	××EI×KKL×××××ES××KDAKEL×G×RN

FIG La

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NO. 523 P. 32

X X E I X K K L X X X X X X E S X IX K D A K E L X G X R NI H. pylori flagellar sheath adheslon protein sequence > MQEIDKKLIOKKLIOKNILESY,QKDAKELKGKRN Figure 5 Plot TOKXLEXXXXDAXE Figure 3 Plot Streptococcus pneumoniae pspA homologous sequence -> Mycoplasma hominis Lp1 homologous sequence -> (SEQ ID NO: 2.) (SEQ ID NO:3), (SEQ ID NO: 4)

FIGAB

Figure 4 Plot

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NO 253 6 33.



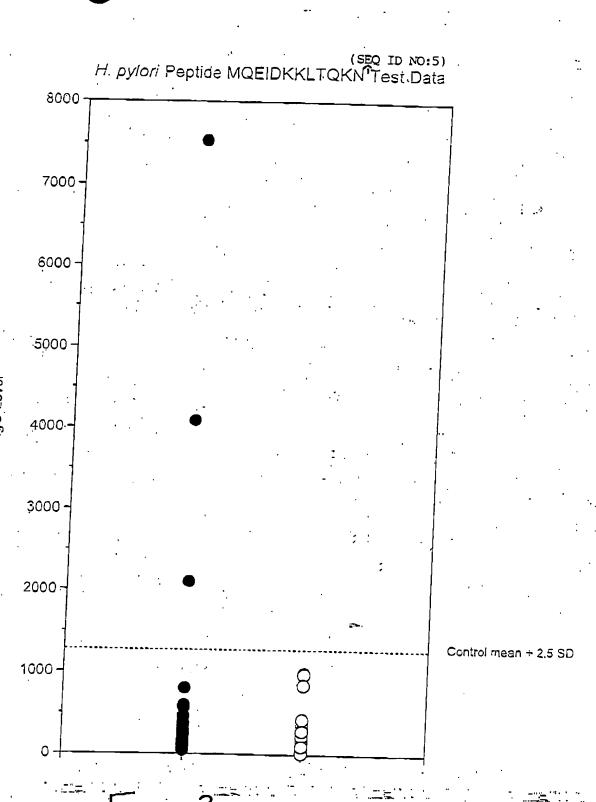


Fig. 3 • H. pylori-Positive Patient Sera

O Control Subject Sera



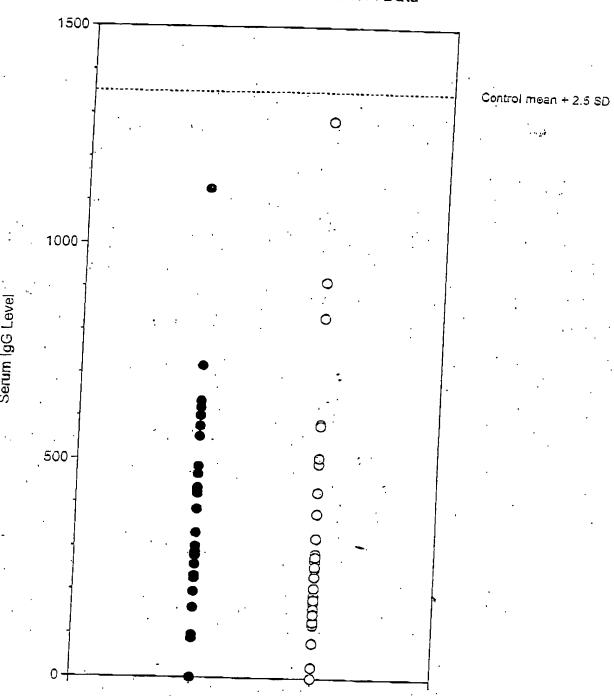


Fig. 4

- H. pylori-Positive Patient Sera
- O Control Subject Sera



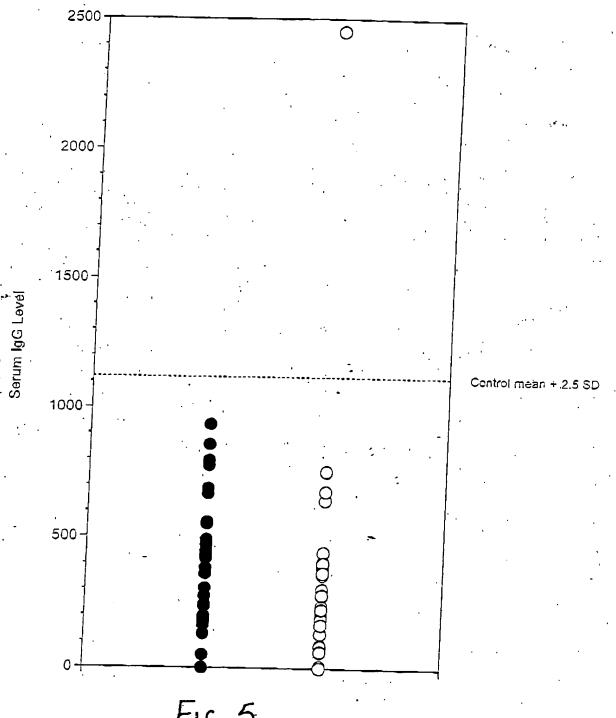


Fig 5

H. pylori-Positive Patient Sera

Control Subject Sera





## F16.6

Parent H. pylori Protein

Adhesin 2

Iron-Regulated Outer Membrane Protein

Lipid A Disaccharide Synthase

LPP20 Lipoprotein

Flagellar Sheath Adhesin

Outer Membrane Protein 1

Outer Membrane Protein 19

Outer Membrane Porin 1

Outer Membrane Porin 2

Vacuolating Cytotoxin

Functionally Specific Peptide Antigens

LPALKENNGKV (SEQ ID NO: 8).

VITKGERTFEYNN (SEQ ID NO:9)

LEQNEGFKRRV (SEQ ID NO: 10)

TVDASGKRSISG (SEQ ID NO: 11)

MQEIDKKLTQKN (SEQ ID NO: 12)

NTRYDRWAKD (SEQ ID NO: 13).

INGDKRTGGKPNTPE (SEQ ID NO: 14)

SSSEYEKLKA (SEQ ID NO: 15)

KEQHEAKGPDV (SEQ ID NO: 16)

QQTHRKINRP (SEQ ID NO: 17)

KQAEEANKTP (SEQ ID NO: 18)

KTPDKPDKVW (SEQ ID NO: 19)



FIG. 7a. Muniber of 19G-Positive Results On Individual Peptide Assays

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FIG. 7b Munder of 19G-Positive Besults On Individual Peptide Assays

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Human Type II CollagenFunctionally Specific Peptide Antigens

QGQDVRQPG (SEQ ID NO: 20)

GRDGE (SEQ ID NO: 21)

GGFDEKAGGA (SEQ ID NO: 22)

WPGLPGA (SEQ ID NO: 23)

GLPGTPGTDGPKGASGPAGPPGAQGPPG (SEQ ID NO: 24)

GPEGAPGKDGGRGLT (SEQ ID NO: 25)

GEVGPPGPAGSAGARGAP (SEQ ID NO: 26)

TGPKGARGAQGPPGATGFPGAA (SEQ ID NO: 27)

NGNPGPPGPPGPS (SEQ ID NO: 28)

LQGPAGPP (SEQ ID NO: 29)

AVGAPGAPGPPGSPGPAGPTGKQGD (SEQ ID NO: 30)

KGHRGFTGLQ (SEQ ID NO: 31)

IGPPGPRGRSGETGPAGPPGN (SEQ ID NO: 32)

FIG 8